

XXII.—*On some Freshwater Fishes from Lower Congo.*

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THE R. Nat. Hist. Museum in Stockholm has recently received from the Swedish missionary, Rev. K. E. Laman, D.D., a small collection of freshwater fishes collected in Lower Congo, partly at Mukimbungu in Belgian Congo and partly at Kingoyi at the watershed between French and Belgian Congo. This collection does not contain more than twenty different species, but it proved at a closer examination to be quite valuable, because not less than six of these species appear to be new. A rather unexpected discovery was also the find of a member of the East-African genus *Discognathus* in Lower Congo.

Mormyrops deliciosus, Leach.

Native name "Mbono."

Locality. Congo River, Mukimbungu.

One specimen, about 60 cm. in total length.

Labeo longipinnis, Blgr.

Native name "Lombuka."

Locality. Congo River, Mukimbungu.

One specimen, measuring about 22 cm. in total length.

This specimen agrees on the whole quite well with Boulenger's description. The pectoral is, however, not quite as long as the head, and it does not reach the ventral. The length of the head is not contained fully four times in the length of head and body.

Labeo nasus, Blgr.

Native name "Mbemba."

Locality. Kwilu River, Mukimbungu.

One specimen, 46.5 cm. in total length.

This specimen differs from Boulenger's description in the following points:—The head is large, so that its length is not contained more than $3\frac{3}{4}$ times in total length, and the depth of the body is only contained $3\frac{1}{2}$ times in the same. It is possible that these differences are due to the much larger size of our specimen than those examined by Boulenger (19 cm.).

With full certainty the relative smallness of the eye can be counted as due to this fact; its length is contained ten times in the length of head and four times in the interorbital width.

Polypterus congicus, Blgr.

Native name "Nkungi angandu."

Locality. Congo River, Mukimbungu.

One specimen, 74 cm. in total length (caudal incl.).

Microthrissa eupleura, sp. n.

Locality. Lower Congo.

Four specimens, the longest about 5 cm.

Depth of body about 4 times in total length (s. c.), head a little more than 4 times in the same. Snout a little shorter than eye. Eye fully 3 times in head. Lower jaw very slightly projecting. The number of scales in lateral line probably only about 30. Ventral scutes 11 in front of ventrals, 10 between ventrals and anal; these scutes extend high up on the sides so as to cover more than $\frac{2}{3}$ of the space between the ventral keel and the lateral line. Pectoral about $\frac{3}{4}$ length of head, not reaching ventral. Origin of dorsal about midway between snout and base of caudal. Dorsal rays 11 in number. Distance from snout to vent about twice as long as distance between vent and base of caudal. Ventrals in advance of origin of dorsal. Caudal peduncle about as long as deep.

Unfortunately the glass in which these specimens were preserved had been broken, so that the specimens arrived in a completely dry state. In consequence of this we had from the beginning not intended to do anything with them. As an examination, however, revealed that the number of ventral scutes in all the specimens received constantly differed from that of the two species of *Microthrissa* hitherto described, and that our specimens thus most easily could be recognized by that characteristic, we were compelled to take up the matter for further consideration. We took also the liberty of sending one of the specimens to Dr. Boulenger, who most kindly confirmed our view that it represented an undescribed species of *Microthrissa*. We are convinced that the above diagnosis will be sufficient for distinguishing the present new species, but the condition of the specimens accounts for the shortcomings of the description.

Barbus lamani, sp. n.

Native name "Nlulu."

Locality. Mukimbungu.

One specimen, 10.2 cm. in total length.

Depth of body $3\frac{2}{3}$ times in total length; length of head $3\frac{1}{4}$ times. Snout blunt, a little longer than eye. Upper margin of eye about touching the upper profile-line of the forehead. Eye 4 times in length of head; interorbital width $3\frac{1}{2}$ times in length of head. Mouth almost terminal. Two barbels on each side, about equal in length, and about $1\frac{1}{3}$ times diameter of eye. Dorsal III 7, a little nearer occiput than caudal, border slightly concave; last simple ray flexible, not enlarged, not serrated, not quite $1\frac{1}{2}$ times in the length of head. Anal III 5, not reaching caudal. Pectoral not quite $1\frac{1}{2}$ times in the length of head, not reaching ventral; base of latter below anterior base of dorsal. Caudal peduncle fully $1\frac{1}{3}$ times as long as deep. Scales with few radiating canals; $26\frac{4\frac{1}{2}}{4\frac{1}{2}}$, 3 between lateral line and ventral, 11 round caudal peduncle. There appears to have been a longitudinal blackish shading along the lateral line, as well on the anterior part of the body as on the caudal peduncle. A small roundish black spot at the base of the caudal.

The general colour in alcohol is rather olive, most of the scales with a dark spot at the base.

This *Barbus* belongs evidently to the same group as *B. camptacanthus*, Bleek., with which it agrees in most respects. It differs, however, by the shape of its snout, the situation of the eye, the much smaller interorbital width, etc.

Barbus camptacanthus, Bleek.

Native name "Nionzi."

Locality. Kingoyi, Lower Congo.

Five specimens.

Discognathus occidentalis, sp. n.

Native name "Mululu."

Locality. At the watershed between French and Belgian Congo, Kingoyi.

Three specimens, length of the largest one 57 mm.

Body feebly compressed, its depth $5\frac{1}{2}$ times in total length. Head moderately depressed, a little broader than deep, a little more than $1\frac{1}{2}$ times as long as broad, its length about 4

times in total length (s. c.). Snout rounded, strongly projecting beyond mouth. Interorbital region flat; its width is contained about $2\frac{1}{2}$ times in length of head. Eye supero-lateral, in middle of length of head, its diameter about 5 times in length of head, a little more than twice in interorbital width. Width of mouth (with lips) a little less than $\frac{1}{2}$ length of head. Upper lip well developed (but much narrower than in *D. blanfordi*), feebly crenulated. Lower lip surrounding a mental disc which is about as broad as long. Two barbels on each side measuring about $\frac{2}{3}$ diameter of eye. Dorsal III 7, equally distant from eye and from caudal, longest ray shorter than head. Anal II 4. Pectoral as long as head, not reaching ventral, which originates below the middle of the dorsal. Caudal emarginated. Lateral line 38, $5\frac{1}{2}$ scales between beginning of dorsal and lateral line. Caudal peduncle about $1\frac{1}{2}$ times as long as deep, 15 scales round the same.

When first examining these specimens we were struck by the great resemblance to *D. blanfordi*, Blgr. Dr. Boulenger, to whom we took the liberty of sending a specimen for comparison, agreed with us in finding it similar to the species mentioned, but pointed out that the upper lip of our form is more feebly developed than in *D. blanfordi*, in which respect it resembles *D. johnstonii*, Blgr. The latter has, however, the eye situated in the second half of the eye, etc.

This species differs very plainly from *D. ornatus*, Nichols and Griscom*, recently described from Stanleyville, by being less compressed and by the supero-lateral situation of the eye, which also is comparatively smaller, and by the not banded caudal.

Clarias lazera, Cuv. Val.

Native name "Mpudi."

Locality. From a lake at Mukimbungu in Lower Congo.

Two specimens.

Clarias ngola, sp. n.

Native name "Ngola."

Locality. Kingoyi, Lower Congo.

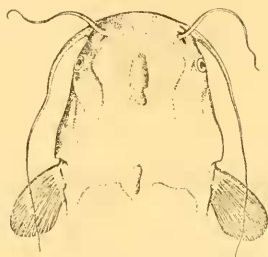
One specimen, 18 cm. in total length.

Depth of body 8 times in total length, length of head about $4\frac{1}{2}$ times. Head $1\frac{1}{4}$ times as long as broad, smooth; occipital

* Bull. Am. Mus. Nat. Hist. vol. xxxvii. 1917, p. 696.

process triangular; frontal fontanelle knife-shaped, its length contained about $3\frac{1}{3}$ times in length of head; occipital fontanelle about half the size of the frontal one, extending well into the occipital process. Eye very small, about 5 times in length of snout and about $6\frac{1}{2}$ times in interorbital width, which nearly equals $\frac{1}{2}$ length of head. Band of præmaxillary

Fig. 1.

Head of *Clarias ngola*, nat. size.

teeth about 6 times as long as broad. Vomerine teeth granular, forming a curved band about as broad as the præmaxillary band. Nasal barbel about $\frac{3}{4}$ length of head. Maxillary barbel $1\frac{1}{4}$ the length of head. Dorsal about 75, its distance from occipital process nearly $\frac{1}{2}$ length of head, its distance from caudal not quite as large as diameter of eye. Anal about 60, equally distant from caudal. Pectoral somewhat longer than half the length of the head, the spine feebly serrated on outer side. Ventral $1\frac{2}{5}$ as distant from base of caudal as from end of snout. Colour in spirit uniformly brown.

Channalabes apus, Günth.

Native name "Ntondia."

Locality. Mukimbungu.

Three specimens.

Amphilius lamani, sp. n.

Native name "Kikweta."

Locality. Kingoyi, Lower Congo.

Two specimens, total length of the type 96 mm.

Depth of body 9 times in total length, length of head $3\frac{2}{5}$ times. Head much depressed, a little longer than broad;

snout broadly rounded, its length being contained about $2\frac{1}{2}$ in the length of the head. Eye very small, about 17 times in length of head, about 4 times in interorbital width. Posterior nostril a little nearer to anterior border of eye than end of snout. Maxillary barbel not quite as long as head, reaching somewhat beyond the root of pectoral. Outer mandibular barbel $\frac{2}{3}$ length of head; inner mandibular barbel nearly $\frac{1}{2}$. Gill-rakers 5 or 6 on lower part of anterior arch, moderately long. Dorsal I 6, nearer end of snout than root of caudal, situated just in advance of the root of ventrals. Adipose dorsal low, not quite twice as long as rayed dorsal. Anal II 5.

Fig. 2.

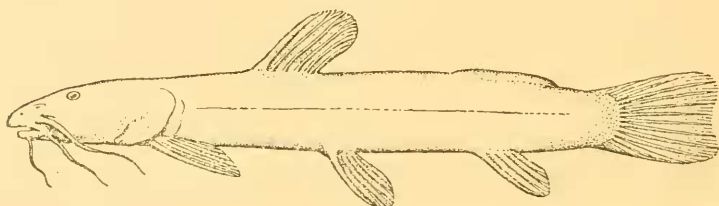
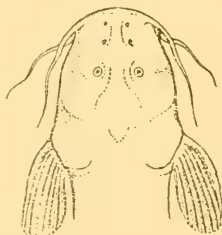
*Amphilius lamani*, nat. size.

Fig. 3.

Head of *Amphilius lamani*, enlarged.

Pectoral $\frac{2}{3}$ length of head. Ventral about as long as pectoral, situated entirely but not much behind dorsal. Caudal truncate. Caudal peduncle, if counted from last ray of anal, $\frac{2}{3}$ as deep as long. Colour in spirit uniformly brown, the dark pigment extending over the greater part of the caudal as well.

In its general shape, with its broad head and deep caudal peduncle, this new species to a certain degree resembles the East-African members of the genus, but its dorsal is not so far advanced as in them. With the recently described *Amphilius notatus*, Nichols and Griscom*, from Faradje our

* *Loc. cit.* p. 715.

species has no likeness whatever, as the shape of the head and the caudal peduncle, the size of the eye, and the adipose fin are completely different.

Synodontis acanthomias, Blgr.

Native name "Nkoko."

Locality. Mukimbungu, in a lake.

One specimen.

Synodontis caudalis, Blgr.

Native name "Ntanta."

Locality. Mukimbungu.

Two specimens.

The present specimens differ from Boulenger's description in having the outer mandibular barbel of the same length as the head and the occipital nuchal shield rugose. With regard to the colour, one of the specimens has the fins beautifully marked with roundish dark spots serially arranged. The body is more or less marbled. In the other specimen the fins do not display any similar pattern, except very feebly on the dorsal.

Synodontis ovidius, sp. n.

Native name "Nsinzi."

Locality. Mukimbungu.

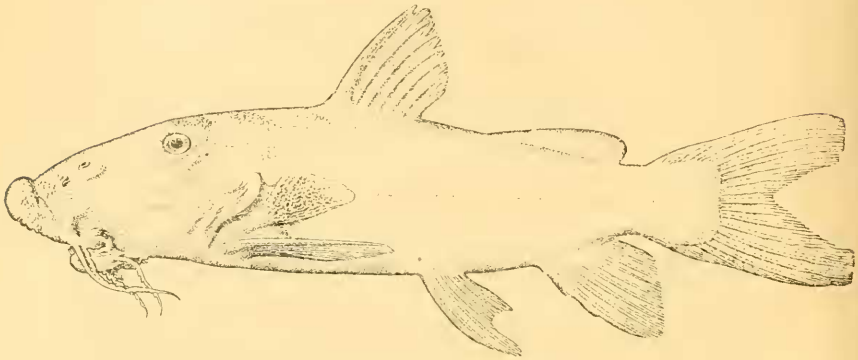
One specimen, 31 cm. in total length (caudal included).

A *Synodontis* related in some degree to *S. longirostris*, Blgr., and *S. labeo*, Gthr., but quite different from both.

Depth of body $4\frac{1}{2}$ times in total length, head $2\frac{3}{4}$. Head about $1\frac{1}{2}$ times as long as broad, rugose above from between the eyes and backwards. Snout $2\frac{1}{4}$ as long as postocular part of head, terminating in a globular swelling, which is continued nearly to the base of the maxillary barbel. Eye supero-lateral, 9 times in length of head, $2\frac{1}{2}$ times in inter-orbital width. Lips very strongly developed, beset with numerous papillæ. Along the upper lip a continuous row of much enlarged papillæ is especially striking. Chin swollen, forming a thick pad. Præmaxillary teeth arranged in two rows, about 13 in the interior and about 7 in the exterior. These rows are rather close together, but there is an interspace between the single teeth. The movable mandibular teeth appear at the first look to be 16 in number, rather long, about $\frac{1}{2}$ the diameter of the eye, but a closer examination reveals some more between and behind the others, so that the

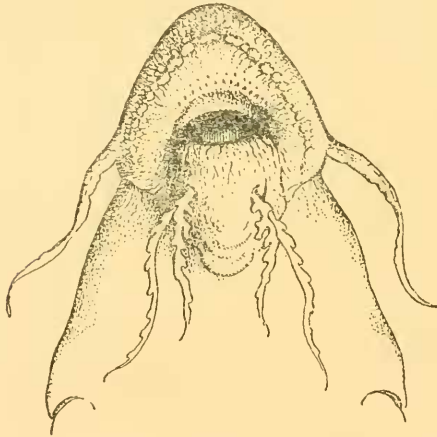
total number amounts to about 25. Maxillary barbel margined and somewhat crenulated, $\frac{1}{2}$ the length of the head. Mandibular barbels branched, the outer $\frac{2}{3}$ length of head, the inner $\frac{1}{3}$. Gill-opening not extending beyond the root of the

Fig. 4.



Synodontis ovidius, a little more than $\frac{1}{3}$ nat. size.

Fig. 5.



Lower side of head of *Synodontis ovidius*, nat. size.

pectoral. Occipital nuchal shield rugose and granular, longer than broad, with rather pointed posterior processes. Humeral process coarsely granular, about twice as long as broad, bluntly pointed, but with convex upper and lower

margins, not extending quite as far back as occipital nuchal process. Dorsal I 6. Dorsal spine a little more than $\frac{1}{2}$ the length of the head, striated in front and on the sides, minutely denticulated behind. Base of adipose dorsal not quite twice as long as its distance from rayed dorsal, the base of which is $1\frac{1}{3}$ the distance between both dorsals. Anal III 8. Pectoral spine longer than dorsal spine, serrated behind. Ventrals nearly reaching anal. Caudal deeply forked (both lobes are truncated, and appear to have been bitten off during life and healed). Caudal peduncle (from adipose fin) a little longer than deep. Colour in spirit brownish olive, with numerous roundish dark spots on head and body as well as on fins. The spots on the sides of the body are about 10 mm. in diameter, those on the head and the fins only about half that size or less.

Phractura bovei, Perugia.

Native name "Ntiki-ntiki."

Locality. Lower Congo.

Two specimens.

Belonoglanis nudipectus, sp. n.

Native name "Ntiki-ntiki."

Locality. Lower Congo.

One specimen, 110 mm. in total length (s. c.).

Depth of body about $13\frac{1}{2}$ times in total length, length of head $8\frac{1}{5}$ times. Head much depressed, $1\frac{1}{5}$ times as long as broad, rugose above; the A-shaped ridge on the snout not so much pronounced as in *B. tenuis*, and its branches divide further backwards than in the species mentioned (*cf.* fig.), about on the level with the posterior nostrils. Occipital process trilobate, but the lateral branches more slender and more diverging from the mesial line than in *B. tenuis* (*cf.* fig.). Snout pointed, a little less than $\frac{2}{3}$ length of head, strongly projecting beyond mouth. Eye $7\frac{1}{2}$ times in length of head, $2\frac{1}{2}$ times in interorbital width. No rounded rugose process on coracoid below base of pectoral. First dorsal I 7, first ray longer than head. Anal 8. Pectoral a little longer than head, not reaching ventral; the latter widely separated from anal. Caudal about half the length of head, rather deeply cleft. Caudal peduncle very thin and depressed, $\frac{2}{5}$ total length. The azygous plate in front of the dorsal fin is broader behind than in front (*cf.* fig.), unlike the condition in *B. tenuis*, Blgr., in which it appears to be broader in front than behind. From the origin of the dorsal 22 pairs of dorsal

scutes are well defined and may easily be counted, but from the middle of the caudal peduncle and backwards the sutures of the scutes are completely coalesced ; 6 large scutes on each side of body between pectoral and ventral; behind the

Fig. 6.



Anterior part of *Belonoglanis nudipectus*, nat. size.

ventrals 15 pairs of well-defined scutes on the lower side of the tail; the following are completely coalesced as well with each other as with the dorsal ones, thus completely encasing the tail. Pale brownish, no blackish marks to be seen.

Malapterurus electricus, Gmel.

Native name "Cuda."

Locality. Mukimbungu, Congo River.

One specimen.

Pelmatochromis lateralis, Blgr..

Native name "Kiala."

Locality. Mukimbungu, Congo River.

One specimen.

Anabas anas, Gthr.

Native name "Kimpete."

Locality. Kingoyi.

Three specimens.